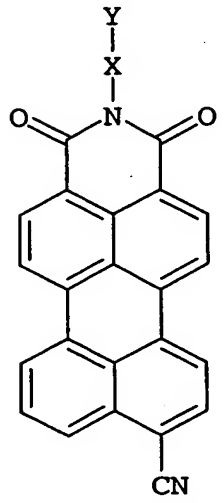
9-Cyano-substituted perylene-3,4-dicarboxylic monoimides

Abstract

A 9-cyano-substituted perylene-3,4-dicarboxylic monoimide I



I

where the variables are defined as follows:

X is a chemical bond; optionally substituted C_1-C_{30}-alkylene, C_5-C_8-cycloalkylene, arylene, hetarylene, C_1-C_{20}-alkylarylene, C_1-C_{20}-alkylhetarylene, aryl- or hetaryl-C_1-C_{20}-alkylene;

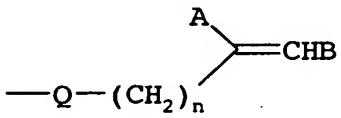
Y is a functional group Y' or a polymerizable group P;

or

X-Y together is an R radical;

Y' is amino, hydroxyl, -COOH, $-SO_3H$, chlorine or bromine;

P is a radical II



II

A, B are each independently hydrogen, C_1-C_6-alkyl or phenyl, or are together a cyclopentene or cyclohexene ring which contains the double bond to which A and B are bonded;

Q is a chemical bond; an -O-, -NR^2-, -S-, -OCO-, -OCOO-, -$OCONR^3$-, -NR^3CO-, -NR^3COO-, -NR^3CONR^4-, -CO-, -COO-, -$CONR^3$-, -SO_2-O-, -SO_2NR^3-, -O-SO_2- or -NR^3SO_2- moiety;

n is 0, 1, 2 or 3;

R is hydrogen; optionally substituted C_1-C_{30}-alkyl, C_5-C_8-cycloalkyl, aryl or hetaryl.